GOVERNMENT OF INDIA
NON-CONVENTIONAL ENERGY SOURCES
LOK SABHA

UNSTARRED QUESTION NO:1141
ANSWERED ON:07.12.2004
USE OF HYDROGEN AS TRANSPORT FUEL
Singh Shri Dushyant

Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether the Government is planning to use hydrogen as transport fuel;

(b) if so, whether any plan has worked out by the Government in this regard;

(c) if so, the details thereof alongwith investment proposed to be made thereon;

(d) whether there is any proposal to seek private cooperation to generate resources for the production of hydrogen energy;

(e) if so, the details thereof; and

(f) the time by which the commercial production is likely to be started?

Answer

MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (INDEPENDENT CHARGE) (SHRI VILAS MUTTEMWAR)

(a), (b): Hydrogen can be used as a transport fuel directly in internal combustion engines and also in fuel cell based vehicles. Hydrogen can also be blended with diesel and CNG. Ministry has been supporting research and demonstration activities to develop hydrogen and fuel cell technologies and their applications for over a decade. As a result of these efforts, among other applications, hydrogen operated motorcycles, three-wheelers and a hydrogen fuel cells - battery operated hybrid Van have been developed in the country. Research is in progress to further improve the technology of prototype vehicles developed so far.

(c), (d) & (e): The Ministry have constituted a National Hydrogen Energy Board, which has high level representation from Government, industry, academic institutions and experts. The Board will provide guidance for the preparation and implementation of the National Hydrogen Energy Road Map, covering all aspects of hydrogen energy starting from production, storage, transport, delivery, safety to applications. The Road Map would identify the thrust areas, long term goals, steps for coordination among various agencies, fiscal and financial measures including requirement of funds to accelerate development and implementation. The Board will assist in developing specific projects with Public Private partnership, which would also facilitate generation of resources from the private sector.

(f): At present hydrogen is being commercially produced in fertilizer and petroleum refining industries. Hydrogen is also produced as a by-product in chlor-alkali industry. The emerging techniques for hydrogen production are from biomass, biological, thermo-chemical, photocatalytic and other renewable energy methods, which are still in research and demonstration stages and need further research before commercial production may be feasible.